

**A METHOD OF SAMPLE PREPARATION FOR ATOM PROBES  
AND SOURCE OF SPECIMENS**

5

**Abstract of the Disclosure**

A specimen for atom probe analysis is prepared by providing a slab of material from which the specimen will be taken; defining a plurality of posts in the slab by in the slab; removing at least one post from the slab; and mounting the post. The post is  
10 shaped to a tip shape suitable for use in the atom probe, such as by focused ion beam milling the post to a tip shape. Grooves are cross cut into the slab. If needed, each groove is filled with a supporting material prior to cutting a parallel or intersecting groove thereto. The invention is also defined as a source of specimens for use in atom probe sampling comprising a slab of material from which the specimen will be taken, which  
15 has been defined into a plurality of posts and from which slab at least one post is removed from the slab and mounted.